



HOWLAND HILL OUTDOOR SCHOOL

EDUCATOR'S GUIDE

Redwood National and State Parks



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Introduction

The Howland Hill Outdoor School (HHOS) is a living and learning facility within the boundaries of Redwood National and State Parks. It is a place where people can leave the classroom and explore the natural environment. This guide will sow the seeds for a successful trip to the outdoor school. HHOS students and teachers can gain new experiences in living and working together. Trust and cooperation blossom at outdoor school and grow further in the classroom providing productive and satisfying experiences for all involved. It is the parks' **education goal to provide curriculum-based educational opportunities for students and teachers in Northern California and Southern Oregon, to develop intellectual and emotional connections to the natural and cultural resources within the redwood region, so as to promote and understanding of park stewardship values, resource management practices, and land management issues.**

Redwood National and State Parks are proud to offer this educational experience to you and your students. It is the parks' **mission to preserve, protect, and make available to all people, for their inspiration, enjoyment, and education, the ancient forests, scenic coastlines, prairies and streams, and their associated natural and cultural values, which define this World Heritage Site; and to help people forge emotional, intellectual, and recreational ties to these parks.**

Redwood National and State Parks would like to thank the educators who provide HHOS staff an opportunity to share these educational experiences with their students.

Please feel free to make this guide a genuine workbook. Fill the margins and empty spaces with notes. Please let HHOS staff know how this guide worked for you and how it could be improved.



The Lodge, with kitchen area in the background

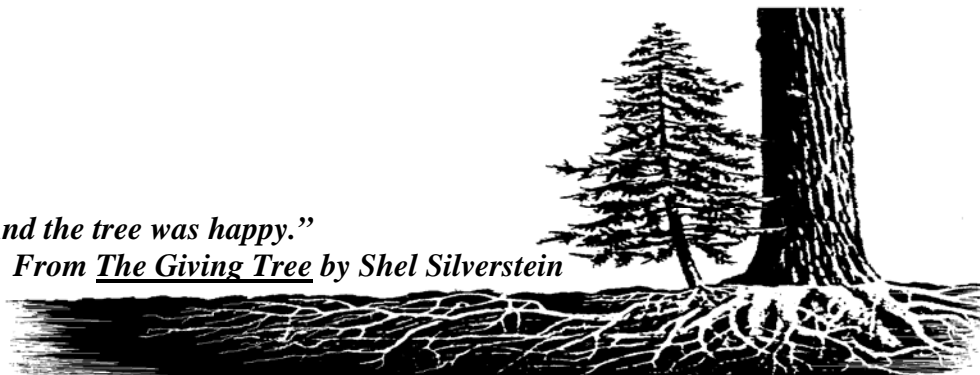
How the Outdoor School Came To Be

In 1979, all that existed on the Howland Hill Outdoor School site was a run-down cabin surrounded by second-growth redwood forest. Redwood National Park's "environmental living program," the program, from which HHOS originated, needed a site in which to grow. The renovation for the HHOS site began in February of 1979, when five temporary ("A"-frame) sleeping shelters were constructed on the grounds. The National Park Service, the California Employment and Training Act (CETA) employees, the California Conservation Corps, Youth Conservation Corps, and volunteers funded and executed the project. Since that time, HHOS has gone through quite a metamorphosis! The first water system and kitchen areas were developed, the site was cleared of debris, sleeping shelters and composting toilets were installed. Even now, facilities continue to be upgraded. In the winter of 2000 we created a new enclosed kitchen, water system, flushing toilets and an emergency shower! As HHOS evolves into a more efficient outdoor school, the humble beginnings and the cooperation of the educational community that turned a dream into reality will always be remembered. Future developments at HHOS depend on the cooperative effort of teachers, parents, students and park staff working together.

The curriculum for environmental education in the park has changed throughout the years as well. The first program, in the north area of the park, focused on the concept of a "living history" program, portraying mountain men at the parks' Nickel Creek campground south of Crescent City. The education program moved to the Howland Hill area in spring of 1978, for a more secluded site. Since the inception of environmental education programming in this park, it has always been curriculum-based, providing teachers and leaders with field-based programs extended from their in-class studies. Most of the participants at HHOS come from Del Norte County, but several hundred students from other areas use the site each year. With the new Environmental Science Education Matrix for Del Norte County, new programs at the site will continue to sprout and be revised. One thing will remain: **the basic core of the curriculum for any group using HHOS will directly relate to redwood ecosystems and to the natural and cultural histories pertaining to its forests, streams, meadows, and seashore habitats of the northwest California coast.**

"And the tree was happy."

From The Giving Tree by Shel Silverstein



What Help Can I Expect?

Teaching is a cooperative effort between the classroom teacher/leader, and trained National and State Park interpreters and volunteers. All work together throughout the planning phase and during instruction. A basic plan with several program choices for the appropriate grade levels will be offered to teachers/leaders during the planning phase. With the assistance of an HHOS director, teachers/leaders will then choose the activities that match their curriculum. It is a requirement that the HHOS curriculum not be a stand-alone program. Rather, teachers should prepare their students in the classroom ahead of the visit, then follow up their visit with activities that relate directly to the topics covered while in the parks. This procedure is designed to make the visit more meaningful to students. Because of this important educational requirement, the HHOS is not available to all groups. Those who choose to do stand-alone programming (mostly for recreation) will need to seek an alternative facility or request a different program in another location in the parks.

It is the responsibility of the teacher/leader to oversee all phases of the visit to the parks. Responsibilities include: attending a teacher workshop at the site, doing preliminary and follow-up work in the classroom, supervising the parents, cooks, counselors and students, providing for the safety, instruction and discipline of students, planning for and implementing meals and educational activities, cleaning the facility, and keeping the park staff notified of any problems, hazards or questions that may arise during their stay.

The reservation year for HHOS is divided into fall, spring and limited use in summer. "**fall**" is mid-September to the end of October. "**spring**" is the third week in April through the end of May prior to Memorial Day. All reservations by phone or email (see page 5) are taken on a first call/first serve basis until all available dates are reserved for that school year. Teacher workshops are usually offered two times a year.

In order to allow the maximum number of students an opportunity to experience HHOS in any given school year, groups/classes are limited to one visit per school year for a visit of one to three days. **First and fourth grade teachers from Del Norte County Unified School District (DNCUSD) will be able to reserve dates for HHOS as early as the first Monday in April for the following school year. All other reservations will be taken first come first serve on the first Monday in March for the following school year.**



Restrooms, built in 2000

How Do I Prepare For This?



The Campfire Ring

On the next page you will find a teacher's check-off list. The list might seem long and complicated, and implementing it may be challenging while continuing your regular program of instruction. We recommend integrating your in-class curriculum to form a preliminary program. Introduce the themes or topics of what will be explored further in the field, and involve the students in the planning, wherever possible. The better you plan your visit, the more you and your students will learn and benefit from your visit to Redwood National and State Parks at the Howland Hill Outdoor School.

Remember that there is a resource person at the park to help you. To reach the Education Specialist dial: **(707) 465-7391** or email lynda_mealue@nps.gov.

Check-off List

1. ⑧ It is required that all teachers and leaders attend a teacher/leader workshop every five years, or when the facility changes need introduction. **** We reserve the right to cancel any group or organization not complying with policies or regulations of the parks.**
2. ⑧ Make your reservations as early as possible.
3. ⑧ At least two weeks prior to the visit meet with or call the HHOS Director, design a daily schedule (lesson plan): who, what, when, where, and how of daily activities, campfires, chores, free time, meal prep, and resource people.
4. ⑧ Make transportation arrangements; and notify the HHOS Director of the type of transportation you will be using and or any changes to the schedule for any reason. **You must have permission prior to bringing a bus past the parking lot.**
5. ⑧ **Check with any school personnel that need to know that you are going. Example: The Grant Administrator.**
6. ⑧ Arrange for the **use fee: 1-35 students = \$50.00 per day, 35-45 students = \$100.00 per day for Monday-Friday, Fall and Spring. For weekend and summer use, fees double.** Your group will be billed prior to your visit. (Please turn to page 23 for more fee information.)
7. ⑧ Arrange for qualified supervision: **one responsible group leader/counselor for every ten students.** This can include the teacher or leader, but not park personnel. At least one group leader must be with each group of students at all times. The parks' staff will attempt to provide instruction at one to fifteen ratio when possible.
8. ⑧ Assign one parent to be the Cook for the entire stay (for overnights).
9. ⑧ Make sure each student has a signed parental permission slip and a name tag.
10. ⑧ Make lists of group happenings: roll call (many groups assign each child a number), cabin assignments, activity groups, and chores before arrival on camp.
11. ⑧ Prepare your group in class: do preliminary activities, review rules, what to bring, show pictures from your trip last year, **make name tags**, etc.
12. ⑧ Bring your class or group to the Howland Hill Outdoor School.
Implement your program! ☺
13. ⑧ Back at school: fill out evaluation (if you have not), and do follow-up activities on your park adventure

Redwood National and State Parks
School Year 2006-2007
HOWLAND HILL OUTDOOR SCHOOL USE AGREEMENT

Version 06

Read and verify information, fill in open blanks, sign, make a copy for your records, and return this "pink sheet" original **no later than two weeks** prior to the date of your visit with your fee payment. See the back (or next page) for address.

Date(s):

Name(s) of teacher/leaders:

Children (45 max): _____ Grade Level(s): _____ # of parents: _____

Student Transportation: _____

Organization/Group: _____ Phone: _____

Mailing Address: _____

E-Mail: _____

The following is the basic agreement for using the Howland Hill Outdoor School (HHOS). **We reserve the right to cancel, at any time, groups failing to comply with our policies and regulations.** HHOS is a facility for the implementation of Environmental Education.

- Your reservation sheet, fee, and curriculum are due two weeks prior to your visit.
- Your group will be responsible for the safe return of all Park property. Return the key and other Park property to the ranger on-site during your check out.
- Check out time for HHOS is no later than 3:30 p.m., and after NPS staff has conducted a check-out inspection of facilities.
- The gate at Howland Hill Road must be **CLOSED** and locked at all times. Please be sure that any lost tourists are out of the gate prior to locking it. The combination for the gate is: _____ (given for overnights). *Only give it to those who need it. *Do not enter the gate prior to 9:00am on the first day of your visit.
- Each group should have one vehicle at the site for emergencies. No more than **three vehicles** are allowed in the parking spaces at the HHOS. Please try and combine gear into one vehicle. Any busses/extra vehicles past the parking lot must have prior permission.
- Groups must use the toilet facilities provided.
- Please pre-cycle, reduce, reuse, and recycle whenever possible! HHOS is a great place to learn by experience. HHOS provides washable dishes, cups, and utensils for your group to use and wash while on site (please do not bring single-use cups, plates, forks etc.).
- Parents and other counselors should know that they are here to help and should refrain from personal conversations when programs are in progress. Please have

parents leave siblings with other caregivers at home; they need to focus on the group.

HHOS use agreement continued:

- **To lessen the chance of an encounter with a bear:**
 - * Do not over-fill the bear-proof garbage cans. They must close completely.
 - * If the garbage pick-up doesn't arrive before you leave the site all garbage beyond the capacity of the bear-proof garbage cans, or if your garbage is extra yummy to bears like salmon parts, etc., must be taken with your group when you leave.
 - * No food is allowed in the cabins at any time. Water bottles are OK.
 - * All foods and other attractants must be properly stored in the kitchen or vehicles.
 - * Keep all doors in camp closed so that other critters do not visit.
- A ratio of one qualified leader/adult to every 10 students must be maintained at all times. Students must not be allowed to wander off by themselves at any time.
- Report any and all accidents or unusual happenings a ranger as soon as possible. Call Northern Communications (dispatch for the parks) at: 916-358-1300.
- No combustible or flammable items are allowed in the cabins (this includes matches, candles, lanterns, or anything else that uses a flame or fire).
- Follow standard National and State Parks rules to help protect and preserve the natural world of the outdoor school. Maintain the standard Park quiet times between 10:00 p.m. and 6:00 a.m. Plant gathering and animal trapping or feeding is not allowed in any National Park.
- The group leader/teacher must be on site with and responsible for the entire group at all times. If a group leader must leave the group a substitute leader must be provided.
- Please provide durable name tags for each member of your group.

The fees: 1-35 students = \$50.00 per day; 36-45 students = \$100.00 per day is required for use of the HHOS. Payment is due two weeks ahead of visit, unless other arrangements have been made. ***Make checks payable to: RPA (Redwood Park Association)**

The Refund policy: You are entitled to 100% refund of your paid fee if you cancel two weeks prior to your visit, or if the park cancels. If you need to cancel within two weeks of your visit, please request in writing for a 50% refund of your paid fee.

***Mail check and this reservation form as soon as possible to :**

**Howland Hill Outdoor School
c/o Accounting Clerk -- Cindy Hensel
Redwood National and State Parks
1111 Second Street, Crescent City, CA 95531**

Sign and return

I have read this agreement and understand what is required to use the HHOS.

Signature of leader(s):

Date:

X

X

Rules and Regulations

Use of Park Facilities:

The use of HHOS is for educational purposes only; family reunions, retreats, etc. must seek another facility. The land and the buildings at the site are the property of the U.S. Government and the National Park Service. Groups using the site must follow Park Service regulations. These rules are for the safety and benefit of everyone and the environment. Please discuss the rules on this page and the reservation form with your leaders and students before arriving at the school.

- * No dogs, cats, or other pets are allowed at the site. The *only* exception is a officially trained assist animal. .
- * Fires are allowed in designated areas only. No gathering of living or dead wood for fires; firewood is provided in the shed. Only adults may use axes, splitting mauls, or matches.
- * No destruction of buildings or park property is allowed Replacement can be costly for your group.
- * Gathering of plants is *not* permitted. All plants, animals, geological, archaeological objects found within the park are under protection of the National Park Service.
- * No firearms, traps, bows, or other weapons are allowed in the park.
- * All students must be with a partner and a qualified group leader at all times.
- * Shoes must be worn at all times. (Native/cultural dance demonstrations are the exception.)
- * Quiet hours will be maintained from 10:00 p.m. until 6:00 a.m.
- * The gate at Howland Hill Road must remain closed at all times and locked at night.
- * Smoking is allowed only in designated fire pit areas or in smoker's personal vehicle, and **NEVER when students are present.**
- * Everyone must use the toilet facilities available while in camp. Proper and safe field sanitation should be used if the group is too far away from camp. When this is necessary, each child should have a partner and one child should stand and be on the look-out for wildlife.
- * Tents and trailers are permitted only with prior permission from the Education Specialist.

Emergency Procedures

The staff at HHOS will provide a cellular phone for emergency use. The cellular phone number is **707-218-7301**. The phone should be used for emergency outgoing calls. You may need to walk around to get a signal. There are important numbers listed on the phone.

1. For a **Law Enforcement Ranger call Northern Communications dispatch: 916-358-1300.**
2. For **local police call Crescent City Sheriff's office at 464-4191 then dial "0"** after the answer.
3. For **life or death only: call 9-1-1** on nearest available phone. If there is no cell phone signal, the closest phone is at the Elk Valley Casino on Howland Hill Rd.
4. All groups must have one vehicle at the site for an emergency exit.
5. Take the key to the gate when you leave - it may be locked.
6. Notify Ed. Specialist as soon as possible of **any** incident **(465-7391)**

* **Sutter Coast Hospital**: approximately 10 miles from the outdoor school.

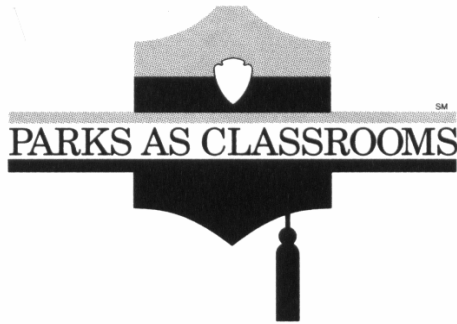
- Head toward Crescent City (turn **left** onto Howland Hill Road at gate).
- Turn **left** onto Elk Valley Road, at the store/stop sign.
- Turn **right** on to Highway 101 through town (four stop lights).
- Turn **right** on to Parkway Drive (follow the hospital signs).
- Turn **left** on to Washington Boulevard. The hospital is one mile on the right, past Walmart and ACE Hardware.

* **Pay phone**: approximately one mile from the gate on Howland Hill Road. From gate, turn **left** onto Howland Hill Road. Proceed to the phone in front of the Elk Valley Casino.

* **Note**: Any vehicle blocking the entrance gate or road between camp and the Howland Hill Rd. can and will be towed away at the owner's expense!



If there is an emergency of any kind, all students and adults not directly involved should proceed to the kitchen area. Sit and wait quietly for further information or instructions. If the accident is in the kitchen students should assemble at the campfire ring.



The Howland Hill Outdoor School Pledge

When I am in the park,
I will do no physical harm
to any living or non-living thing.
This includes all the plants,
animals, buildings, trails,
and people.

I will keep our cabin clean,
And stay out of others' cabins.

I will gladly do all my
assignments to the best
of my ability.

I will do my part to make our outing a happy one.

Name: _____

Pre- and Post-Visit Activities and Follow Up Evaluations

The success of your students' total experience at Howland Hill will rely a great deal on the preliminary and follow-up activities you implement at school.

Students who have had a preliminary introduction to the site and rules, and introductory activities on the concepts and themes they will explore in the parks, will have an enhanced understanding of the HHOS experience. It is also important for the students to reflect on their visit by engaging in activities which reinforce concepts and themes studied at the Outdoor School. Students should be encouraged to communicate concepts learned by writing, acting, singing, drawing, or speaking. Some of the programs used at the outdoor school suggest follow-up activities and provide journals for the students. These can be additions to your school's curriculum, and help you meet your assessment goals.

Following your visit, please complete the Program/Facility evaluation form on the following page. Your input is invaluable to the continued growth and improvement of Howland Hill Outdoor School. We take these evaluations very seriously, and have implemented many changes that teachers have suggested on past evaluations. For example, we would not have such a nice kitchen and restroom had it not been for your input!

Thank you for your continued support!



*"We can only give our children two gifts...
One is roots, and the other is wings."*

Program/Facility Evaluation

*Year 20_____

Your name:_____

Your group/school:_____

Date of your visit to HHOS _____

Are you a repeat user of HHOS? YES NO (circle one)

(Please use the back of this sheet or additional pages if needed.)

1. How did HHOS site and facilities suit the needs of your group?

2. How did HHOS staff accommodate the needs of your group? (Please use names where possible.)

3. What is your impression of the HHOS program, overall? (activities, themes, flow, etc.)

4. Did the HHOS activities meet your curriculum needs? YES NO (circle one). Indicate what activities or themes were most useful or other themes you would like included.

5. Did you use the Educator's Guide for planning? YES NO (circle one). How could the HHOS Educator's Guide be more helpful in preparing you for a visit?

**Thank you for taking the time to help the HHOS grow!*

**Please mail to: Rick Nolan/ Chief of Interpretation
Redwood National and State Parks
1111 Second Street
Crescent City, CA. 95531**

What Should I Pack?

For an Overnight Visit:

Keep these in mind when packing:

- There is no electricity at the Outdoor School!
- Please leave at home: radios, personal music, computer games, toys, siblings, propane hair dryers, and any other item(s) not allowed or would be a distraction in a school setting.
- Food or snacks are not allowed in sleeping cabins (food attracts critters).
- All personal medicines should be with the group leader.
- Parents should notify teachers if they are going to visit the camp during their child's visit to the HHOS. We support the "school site regulations" for the safety of children.

Bedding: *Thin foam pad is provided.*

_____ warm sleeping bag
_____ or very warm bedroll

Clothing: *Layered clothing is best!*

_____ warm hat (to keep in body heat)
_____ 2 sets of underclothes (wear one)
_____ 2 pairs of socks (or more)
_____ 2 shirts
_____ 2 pairs of long pants
_____ warm jacket or coat
_____ rain gear (it can anytime)
_____ closed toed shoes
_____ pajamas
_____ sweater or sweat shirt
_____ gloves (they do make a difference)
_____ one large plastic bag (labeled)

Food: Label please

_____ Lunch (if requested by teacher)

Luggage:

_____ backpack, stuff sack, or suit case full of gear
_____ daypack with small, filled water bottle that doesn't leak

Toilet Articles: *Labeled, in zip-lock bags.*

_____ comb or brush
_____ hand towel
_____ toothbrush/paste

Extras:

_____ flashlight and batteries
_____ camera
_____ plastic bag for emergency raincoat

_____ **A positive attitude!!** (don't leave home without it)



One of six cabins on site

How Do We Get There?

Visitors searching for the Howland Hill Outdoor School should look in the Milky Way Galaxy, Planet Earth, North American continent, United States of America, California, Redwood National and State Parks, Crescent City, Highway 101, Elk Valley Road to Howland Hill Road. The white access gate to the outdoor school will be on your right, about one-mile beyond the paved portion of Howland Hill Rd., just as you reach the summit (traveling from the west). **The gate is usually locked. On the day you arrive, a ranger will make sure it is *unlocked* (but closed). Lift the pin through the gate tongue that is holding it closed; drive in, CLOSE GATE, and replace pin when you are in.** Be sure to familiarize yourself with the area maps on pages 30 through 33.

Make sure that the gate is not left open at any time during your stay!

The gate **MUST** be locked at night. If you are staying overnight, a ranger will issue you a key and or combination so that you may open the gate in an emergency. The gate key will also unlock the lodge and the kitchen. Please leave the cabins unlocked when you leave.

Parking is limited to a small area about $\frac{3}{4}$ mile from the gate on Howland Hill Road, and $\frac{1}{4}$ mile from the outdoor school. At the parking lot you will see a school sign and a toilet on your right (see below).

In order to keep the outdoor school as uncluttered and natural as possible for the enjoyment of the students, only three vehicles from your group may park in camp. Other vehicles may be driven in to the school to unload, but they must be returned to the parking lot. If there are too many vehicles at the site, or parked blocking access, you will be asked to move them; otherwise, they will be towed away at the owner's expense! Please make sure all drivers know this. Dealing with parking issues greatly impacts teaching time.

Buses are not allowed past the parking lot except with special permission from the Education Specialist. If arriving by bus, school groups should bring a separate vehicle or trailer for transporting gear from the parking lot to the HHOS, and for emergencies.



The compost toilet in parking lot

Outdoor Teaching/Learning in the Parks

Surprise!

Outside of the controlled environment of the classroom, the mantra is “plan on the unplanned.” Out on the trail a sudden hummingbird display or startled garter snake can steal the spotlight from any lesson plan. The surprise occurrence, rather than an unwelcome disruption, becomes a day's most wonderful resource, priming the students' curiosity and excitement. We try to always to make the most of it by relating it to other observations or to a broader concept, or by creating a spontaneous sensory exercise.

First and foremost = Protect the Habitat

Outdoor education, like any other human activity, has an impact on the environment. We practice trail courtesy (walking gently, single file). We endeavor to not create "human pollution" (noise, trail erosion, etc.). Whenever possible, we take small groups to study sites, and encourage awareness to the sensitivity of the natural world.



Redwood National & State Parks

Our common mission is to preserve and make available to all people, for their inspiration, enjoyment, and education: the ancient forests, scenic coastlines, prairies, streams, and their associated natural and cultural values which define this World Heritage Site; and to help people forge emotional, intellectual, and recreational ties to these parks.

Park Appropriate?

Curriculum developed for outdoor education programs within Redwood National and State Parks must reflect the parks' primary interpretive themes, while at the same time meeting the schools' or groups' educational goals or framework. Working together, this can be done with a little imagination and creativity. Listed below are the identified primary themes for Redwood National and State Parks:



The ancient coast redwood ecosystem preserved in Redwood National and State Parks protects some of the world's most majestic forests and is home to a unique community of plants and animals.



The mosaic of habitats within Redwood National and State Parks, which includes old-growth forest, prairies, oak woodlands, and coastal and near-shore marine environments, are increasingly important refugia for a number of rare and endangered species.



Steep, highly erodable landscapes, heavy rainfall, powerful rivers, and frequent earthquakes are all related to local geologic forces generated near the junction of the three tectonic plates of the earth's crust that underlie the region.



The Yurok, Tolowa, Hupa, and Chilula peoples who have lived here for thousands of years, and whose aboriginal lands are now within park boundaries, continue many aspects of their traditional life ways.



Attracted by the diverse natural resources of the northern California coast, settlers developed a number of industries including mining, ranching, fishing, and logging.



Redwood National and State Parks preserve the living legacy of 19th and 20th century conservation efforts, which set aside diminishing redwood forests, helped spur a worldwide environmental movement, and provides a testing ground for cooperative management and large scale restoration of severely impacted forest lands.

How Will Our Time Be Spent?

A sample schedule for a 1-day visit:

- 9:00 a.m. Arrive HHOS parking lot, meet Ranger(s).
- 9:15 a.m. Hike in on the Un-Nature Trail (about ½ mile).
- 9:45 a.m. Short tour of site, rest-room break, and program introduction.
- 10:15 a.m. Activity time: Two Stations (25 min. each) and Hike (45 min.), or four stations (25 min. each).
- 10:45 a.m. Switch stations and repeat activity.
- 11:15 a.m. Lunch
- 11:45 a.m. Switch stations or hike for one hour
- 12:15 p.m. Switch activity stations, or continue with hike, or entire group game/activity.
- 12:45 p.m. Wrap up discussion and check out.
- 1:00 p.m. First, second, and third grades depart, upper grades usually stay longer if transportation allows (This usually provides at least one more hour of activity time).
- 2:30 p.m. Depart (fourth grade and up).



A sample schedule for a 2-day visit

The following schedule is an example of a typical overnight adventure at the Howland Hill Outdoor School. We recommend that your group spend at least one night at the site. There is magic in those hours spent around the campfire gazing at the stars, or walking silently through the dark woods. It seems that the longer you stay, the more fulfilling your experience will be.

DAY ONE...

9:00 a.m. Arrive at HHOS parking lot, meet Ranger(s), introduction, arrange for all necessary gear to be taken to the school site. The less the students carry the better. There is a rest room in the parking lot for those in need.

9:15 a.m. Hike in to the school via the Un-Nature Trail (about ½ mile).

9:50 a.m. Orientation to the site, discussion of rules (required for ALL in attendance).

10:00 a.m. Restroom break and unpack - Remind students: No food or fire in the cabins!

10:30 a.m. Snack and program introduction.

11:00 a.m. Activity time: 2 Stations (30 min.).

12:00 noon Lunch

12:30 p.m. Activity Time: 2 Stations (60 min. each).

2:30 p.m. Wrap up, or questions for the rangers.

3:00 p.m. Rangers leave the site - you're in charge of the group, the gate, and the phone!

3:00 p.m. Teacher/Leader program time.

4:30 p.m. Prepare dinner with trained staff member (For those not involved in dinner preparation, plan supervised nature games in the meadow or have cabin time).
No student should be left unattended.

5:00 p.m. Dinner clean-up and campfire preparation

Continued next page.....



Marbled murrelets



DAY ONE (CONTINUED)....

- 7:00 p.m. Campfire activities. (Don't be surprised if a Law Enforcement Ranger drives through)
- 9:00 p.m. Prepare for bed. (This means that the activities should quiet down).
- 9:30 p.m. Bedtime (settle down and stay inside)
- 10:00 p.m. Lock gate if not already locked and maintain QUIET until 6:00 a.m. This is a National and State Park policy nationwide.

DAY TWO

- 7:00 a.m. Breakfast preparation crew and fire crew wake up!
- 7:15 a.m. Breakfast preparation.
- 7:30 a.m. Breakfast
- 8:00 a.m. Breakfast clean up and packing.
- 8:30 a.m. Camp clean up and load gear into vehicles (nothing left in cabins).
- 9:00 a.m. Ranger(s) arrive and set up.
- 9:15 a.m. Flag Ceremony/Activity time (stations, hikes, etc.).
- 12:00 noon Lunch
- 12:30 p.m. Wrap up (evaluations and check out).
- 1:00 p.m. Hike to parking lot via road (most groups leave at this time).
- 1:15 p.m. Board bus or cars and depart the HHOS.
- 3:30 p.m. The latest time that groups may remain at the site on the last day. The Rangers will be locking the gate after you leave.

Doesn't time fly when you are having fun?

How Out-of-Town Groups Spend Their Time:

A sample schedule (Just because “out of towners” do this doesn’t mean “towners” can’t!)

DAY ONE (the Forests)

- 11:00 a.m. Arrive at Jedediah Smith State Park Picnic grounds for lunch. The Smith River is beautiful but can be very dangerous due to fast currents. Please keep students away from river until ranger arrives to set safe boundaries.
- 11:30 a.m. Meet Ranger - Introduction to Redwood National and State Parks.
- 11:45 a.m. Leave for Simpson-Reed Trail.
- 12:00 p.m. Hike Simpson-Reed Trail.
- 1:30 p.m. Travel to Howland Hill Outdoor School (HHOS) via Howland Hill Road (from Highway 199 to South Fork Road).
- 2:00 p.m. Arrive at HHOS parking lot, and hike in on the Un-Nature Trail (½ mile).
- 2:30 p.m. Tour camp/rules
- 3:00 p.m. Rangers leave and group unpacks gear to assigned cabins.
- 5:00 p.m. Dinner preparation with trained staff member and cabin/activity time (No students left alone at any time).

(See preceding pages for evening activity time blocks)

DAY TWO (Tidepools)

- 7:00 a.m. Breakfast. Most groups opt to pack up by this time and a few adults are left to clean up the kitchen and do final clean up at the site (Most groups don't return to the HHOS).
- 7:30 a.m. Hike to the bus at the parking lot.
- 8:00 a.m. Meet Ranger(s) at Crescent Beach Overlook for introduction to tidepools
- 8:30 a.m. Tidepool walk (arrive at the beach ½ hour before low tide). Low tides vary, but schedules can be adapted.
- 10:00 a.m. Head back to the bus and travel to next destination.
- 11:30 a.m. Lunch at Crescent Beach or at the City Park on Front Street.
- 12:00 p.m. Head for home.

Chores

When planning your outing, it is best to divide the class into groups for the various activities, including the different camp chores. By designating groups in advance, you will ensure that all chores are assigned and carried out properly. Depending upon your group size, you may want to divide the chores even more specifically; here are the general categories:

- Dinner Prep -** No student is allowed to cook in the kitchen. They may set tables, set up drinks, help with clean up (see page 25a).
- Fire Crew-** Gather firewood from woodshed, set up campfire, and stockpile wood for evening. **Students are not allowed to use the stove, matches or axes.**
- Dinner Clean up -** Scrape off all food scraps before rinsing, washing, rinsing, and sanitizing dishes. Follow directions posted above sinks. Let dishes air dry, put away food, clean up ground around kitchen and eating area, sweep porch. Sweep and mop inside of kitchen and wash all surfaces with soap and water. Please do not forget the sinks outside. Take garbage to the cans. Make sure propane lights are all the way off when you leave.
- Breakfast Prep -** See dinner prep above.
- Breakfast Fire-** Start warming fire in the lodge or campfire area.
- Breakfast Clean-** See dinner clean up above.
- Lodge Clean-up-** Pick up litter, pack up and put away all class supplies, clean off tables, replenish wood box, and sweep floors and porch.
- Grounds Clean -** Pick up litter and put it in bear-proof garbage cans. Use can numbered “1” first, then “2”, etc. Do not over load the cans! (See page 26 for bear information, or the reservation form on page 8). Put clean glass, plastics #1 and #2, clean steel, and clean aluminum in “recycle” can. Make sure all fires are out!
- Toilet Clean-up-** Sweep inside floors, cement pad, and pick up trash take it to the bear-proof trash cans. Replenish toilet paper, towels and soap if needed.
- Cabins-** Pack all personal belongings, load them into vehicle. Pick up all litter in and outside. Stack sleeping pads in lodge, sweep sleeping platform, floors, and porch (put all sweepings in a dustpan; take it to the bear-proof trash cans). Put brooms back in the lodge, and close doors and windows if possible. Report any damage to the Ranger on site. If the last group has left anything, please place it in the Lodge.

Money & Meals...

Money and meals both require good planning when considering your trip to Howland Hill Outdoor School. If you plan wisely, expenses can be kept to a minimum.

Your costs will include:

- **Use Fee, paid at least two weeks ahead of time**
 - **Transportation Expenses**
 - **Food Costs**
 - **Program Materials (your own, if for your evening programs, etc.)**
1. **The Use Fee** helps to defray the operation and maintenance costs at HHOS. Each group will be billed at least one month prior to scheduled date at the site. The charge per day for the use of the HHOS is \$50.00 for 1-35 students, and \$100.00 for 36-45 students **(Saturday, Sunday, and summer use fees are double)**. The fee will be due two weeks prior to arrival at the site.
 - *Cancellations/Refunds: You are entitled to 100% refund of your paid fee if you cancel two weeks prior to your visit, or if the park cancels. If you request it in writing, you will be refunded 50% of your paid fee if you cancel within two weeks prior to your visit.
 - *Mail checks, payable to **Redwood Park Association or “RPA,”** and reservation forms to: **Account Clerk, Redwood National and State Parks**
1111 Second St., Crescent City, CA 95531
 2. **Transportation** charges for buses vary. Some groups rely solely on personal vehicles (from parents, etc.) for transportation to the school. Please keep the numbers of vehicles to a minimum, and make sure all drivers understand how to get to the HHOS, and where to park.
 3. **Food** costs average around \$20.00 per person per day. On Day One most groups bring their own pre-packed lunch from home or school, well-labeled, and packed separately. Day Two lunches are best made at HHOS or order them from a commercial kitchen. Some groups have defrayed the cost by asking for money from parents to buy breakfast lunch and dinner foods, by requesting school lunch support, grants, and even by asking grocery stores for donations! Health regulations do not allow food prepared at home and reheated.

Kitchen and eating/teaching area



...Money and Meals continued:

EXTRAS YOU SHOULD BRING FOR YOUR MEAL PREPARATION

- * Coolers with your food/ice packed in them
- * Wooden matches and or long neck lighter
- * Dry newspaper and kindling for fire starting
- * Hot pads
- * Extra cookware, if needed
- * Roasting sticks or forks for hot dogs or marshmallows (We do not keep used ones!)
- * Coffee (Some people need this in the morning!)

What to do if you would like parents to be at the HHOS for a meal, and extras you should bring to the HHOS.

Your group must accept responsibility for the actions of *EVERYONE* at the site, parents included (see reservation form)! Please keep the following in mind:

- * **All visitors must follow all HHOS and Redwood National and State Parks Regulations while on the site! Make sure they are aware ahead of time.**
- * Provide careful directions to the HHOS parking lot (be sure to remind them to close the gate). Also remind parents that they must park in the designated area and walk the short distance (1/4 mile) to the school. Cars coming and going at the site detract from the natural setting and interrupt programs. Since the parking area is small, please ask parents to park in a way that maximizes the available space.



Inside view of cooking area



Standard Operating Procedures (SOPs) for the HHOS Kitchen

It is the goal of this school to provide you with the safest kitchen we can. The regulations below are based on both the National and California State Health Standards; all kitchen users must follow these procedures or will be asked to leave.

- ❖ One person from each group must be assigned to lead the kitchen crews. Please let the ranger know what you are planning to cook for meals
- ❖ No children are allowed in the kitchen to prepare meals.
- ❖ All who enter the kitchen must wash their hands first at the hand-washing sink. If you touch your face at any time (even if it is just to scratch), wash your hands again.
- ❖ Hair must be held back.
- ❖ Wash cutting blocks, tools, and counters with bleach and water after every food is prepared. Wash your hands again at the hand-washing sink. The food prep sink is only for food.
- ❖ If you are not sure that the tool you want to use is clean, wash it before you use it.
- ❖ Wear an apron to keep you and the food clean.
- ❖ Use plastic food handling gloves to serve food.
- ❖ If it boils over, clean it up.
- ❖ Keep paths clear at all times. Empty boxes must be folded down and taken out of the kitchen to the recycle area.
- ❖ Coolers must be kept at 40 degrees for cold storage.
- ❖ The fan must be used, or the roll-up windows opened, when food is being cooked on the stove.
- ❖ Do not eat your meal in the kitchen. If you must sample something while cooking, use a clean spoon and put it into the dirty dish tray immediately after each taste.
- ❖ If any tool touches the ground, get a clean one and wash the old one.
- ❖ If any food touches the ground, throw it away!
- ❖ If the food is hot keep it that way. A hot food warmer is provided for you to keep food warm. You may also use the stove to serve from.
- ❖ **No cooked leftovers are allowed to be reserved in this kitchen! Leftovers must be thrown away.**
- ❖ Follow clean-up procedures (posted in kitchen) after every meal.

Equipment

Howland Hill Outdoor School will provide each group with “The Eco Box,” which contains some supplies that can be handy: scissors, tape, crayons, glue, pencils, paper, etc. The following equipment is also available if you request it at least two weeks in advance. These items may be checked out for use in your classroom but must be returned on the agreed date and time, as a group at the HHOS may need it. Return all park property to the Ranger on site on the last day of your stay at the HHOS (as per reservation form page 7 and 8).

- Identification guides and posters (assorted)
- Stream study equipment pack (ID cards, bug boxes)
- 2 dissecting microscopes
- hand lenses and jeweler’s loupes
- Compasses
- Binoculars
- Animal puppets
- Children’s nature and nature-related story books
- Six tidepool packs with study equipment
- Rubber tracks and casts (you provide the plaster for casts)
- “Bridges” Traveling Trunk for 7th and 8th grades
- Assorted other “park areas” for exploration with a Ranger



*Mill Creek/Nickerson Ranch
Trailhead on Howland Hill Rd.
(2.5 mi. loop)*

You will be held financially responsible for any equipment that is lost or damaged while in your care (see reservation form). To avoid vandalism and theft at HHOS, nothing of value is stored or left overnight on site; all materials must be transported in for each group.

Extra-Curricular Activities or Other Adventures in the Redwood Area

These businesses and organizations offer special rates for educational school groups, or have special tours for school groups. These activities can add to your group’s enjoyment of the local area. They request that you make your arrangements well in advance! If you feel that others should be included, please let us know. You may also check www.creec.org region one for other listings in Del Norte County.

(707) 464-4900	Ocean World (Crescent City)
(707) 464-6265	North Coast Marine Mammal Center (Crescent City)
(707) 464-3089	Battery Point Lighthouse (Crescent City)
(707) 464-3922	Del Norte County Historical Museum (Crescent City)
(707) 464-9503	Crescent City Swimming Pool (Crescent City)
(707) 482-5971	Tour Thru Tree (Klamath)
(707) 482-2251	Trees of Mystery (Klamath)
(800) 343-8300	Del Norte County Chamber of Commerce
(707) 464-9556	The Old School House (built 1902) located at the Fair Grounds

The Bear Facts!



Black Bear (*Ursus americanus*)

- * Store ALL food in the trunk of your vehicle, or the HHOS kitchen.
- * Put food away and clean area immediately after cooking and eating.
- * Do not feed bears or any other creatures!
- * Do not litter!
- * Discard waste and garbage in bear-proof trash cans as soon as possible after preparing and or eating meals. (Everyone is responsible for his or her own trash.)
- * Do not over-fill bear-proof trashcans. If it doesn't fit safely inside cans, take it with you.
- * If a bear should wander by discourage it by making a lot of noise!
- * Keep in mind that gum, lip-gloss, toothpaste, and deodorant attract bears. Leave them at home or keep items away from critters. We ask that toiletries be in a labeled zip-lock bag.

Don't Be Responsible For A Dead Bear!



Store Food and Dispose of Garbage Properly

*Violators will be issued a citation under
36 CFR 2.10(d) Redwood National and State Parks*

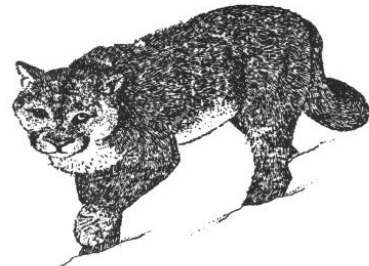
Redwood

National and State Parks

National Park Service
US Department of the Interior

Department of Parks and Recreation
State of California

Mountain Lions In The Redwood Forest



Mountain lions, or cougars roam throughout the Redwood National and State Parks. Although they have been spotted in picnic areas and along trails and roads, your chance of seeing one of these secretive animals is rare.

In May of 1994, several sightings of a mountain lion along Redwood Creek Trail near the parking lot forced the trail to be closed temporarily. Mountain lions have been known to attack people and pets but there has never been a reported attack on humans in the north coast redwood parks. The likelihood of encountering an aggressive lion is very remote.

However, it is wise to be prepared. Avoid hiking alone. Watch children closely. Do not let them run ahead of you on the trail. Hikers in particular are encouraged to read the tips in this brochure carefully. Following these tips will allow both you and the mountain lion to enjoy the parks.

Hiker Tips:

- ♦Don't run. Mountain lions may chase things that run because they associate running with prey.

- ♦Do not crouch down; try to appear as large as possible. Attempts to hide may be unsuccessful; mountain lions see most people long before people spot them.

- ♦Hold your ground, or move away slowly while facing the lion.

- ♦If you have little children with you, pick them up.

- ♦If the lion behaves aggressively, wave your hands, shout, and throw sticks at it.

- ♦If attacked, fight back.

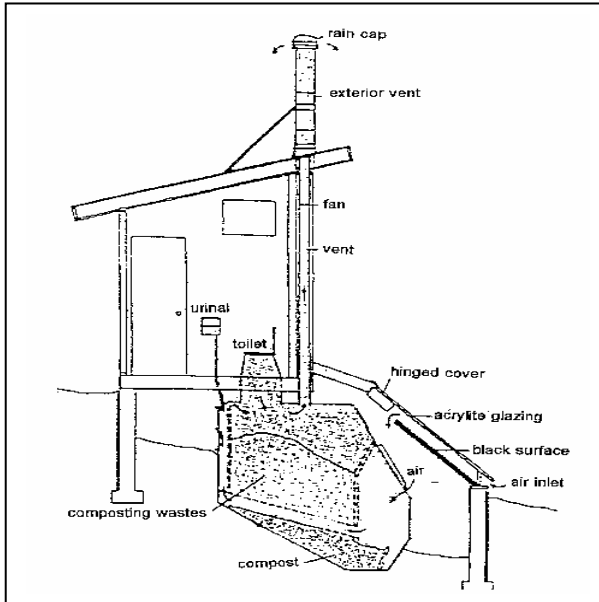
- ♦Report any lion sightings to a ranger immediately. Call (707) 464-6101 or stop by park information centers in Orick and Crescent City.

The reclusive behavior of mountain lions as well as their tendency to live in remote areas explain why we know relatively little about these graceful cats. They once ranged from northern Canada through South America and from coast to coast. It is probable that no other land mammal in this hemisphere had a more extensive range. Due to hunting and loss of habitat, mountain lions have been largely creatures of the west since the 1920's.

The mountain lion is, for many, the quintessential symbol of wilderness: a large animal ranging freely in wild areas, independent of human interference. They are the largest carnivore in the north coast redwood parks, at the top of the food chain and therefore are an indicator of this ecosystem's health. As you visit lion habitat, it is important that you understand the behaviors that these cats use to survive. You can then act accordingly to protect yourself and these animals in their native habitat.



The Clivus Toilet (It is still there!)



The Clivus Multrum environmental “waste station” is a composting toilet that turns human waste into an odorless material that can be used as fertilizer. The process combines waste with organic material (sawdust), and heat (from the sun, collected in the sloping structure at the rear of the building), and air.

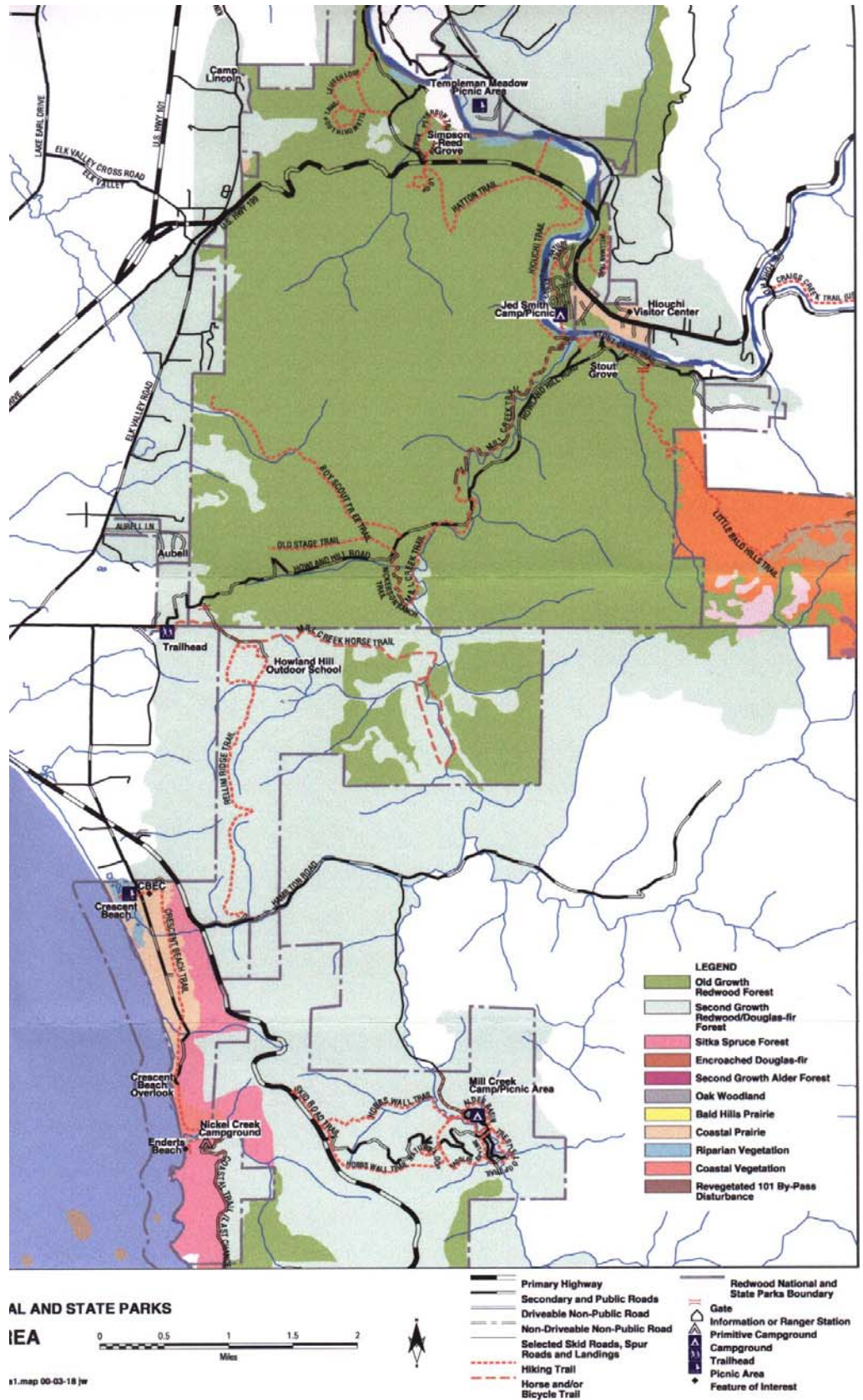


Clivus Multrum toilets, front view

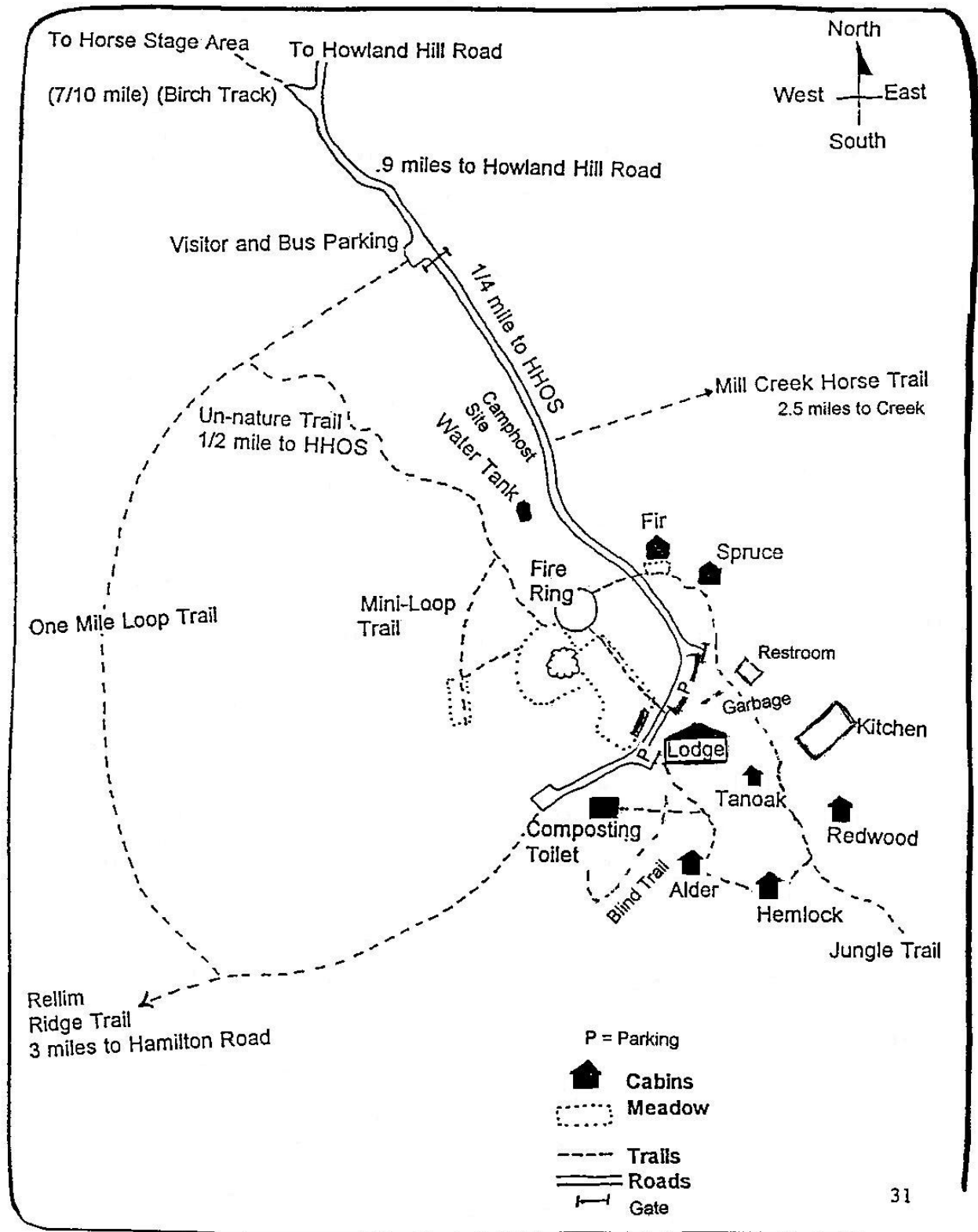
Some very important concerns to keep in mind when using the Clivus Toilet:

1. Only human waste, toilet paper, and the available sawdust are to go into the toilet. No food scraps! Please put personal hygiene items in the bear-proof garbage cans.
2. Before one exits the restroom, the lid to the toilet must be closed. This prevents the facility from smelling foul and helps to compost the waste.
3. Please educate your students on the proper use of the Clivus.
4. The Clivus will be used when groups are studying in the meadow so students will not have use the more distant ‘regular’ toilets.

Getting There:



The HHOS Area Map

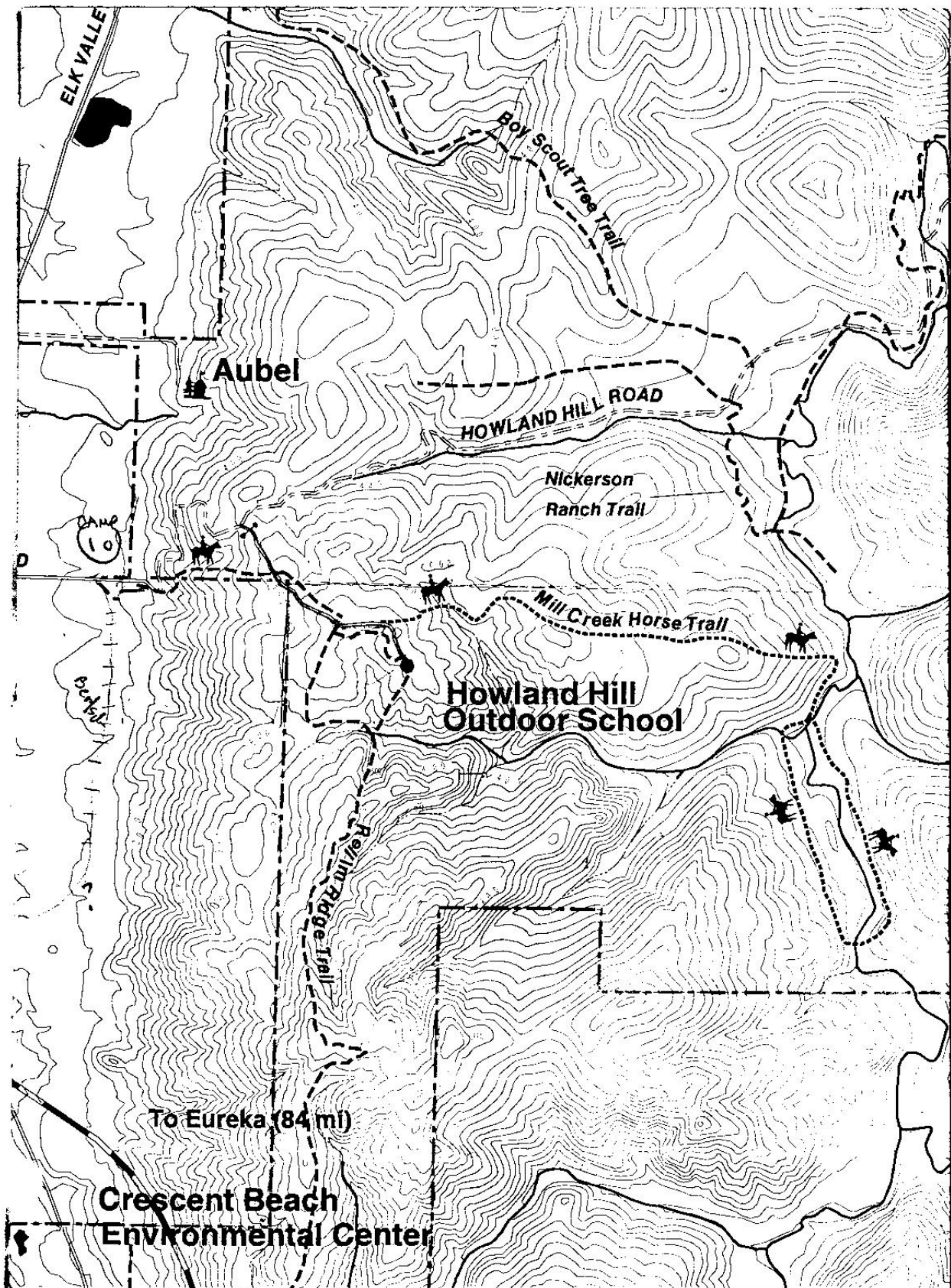


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HHOS Camp Facilities Map



North Area Topographic Map





COAST REDWOOD

(*Sequoia sempervirens*)

California's magnificent Coast Redwood is the world's tallest known tree and one of the world's oldest trees. Average mature trees, several hundred years old, stand from 200 to 240 feet tall and have diameters of 10 to 15 feet, and some trees have been measured at more than 360 feet. In the most favorable parts of their range, Coast Redwoods can live more than two thousand years.

Redwoods are named for the color of their bark and heartwood. The high tannin content of the wood gives the trees remarkable resistance to fungus diseases and insect infestations. The thick, fibrous bark has an even higher tannin content, and insulates them from the periodic fires which have occurred naturally down through the centuries in the Redwood region.

These immense trees have delicate foliage. Narrow, sharp-pointed needles only one-half to three-quarters of an inch long grow flat along their stems, forming feathery sprays. Redwood cones are about an inch long and each cone contains 14 to 24 tiny seeds—a pound of Redwood seeds would number more than a hundred thousand. Redwood seedlings grow rapidly, more than a foot per year in good conditions. Young trees also sprout from their parent's roots, taking advantage of the established root system.

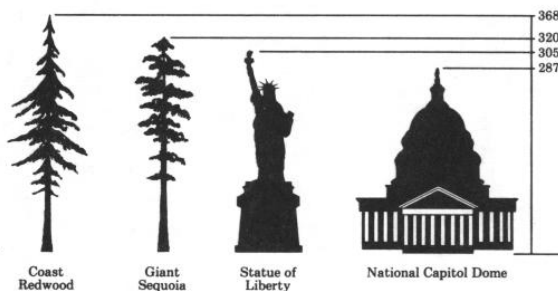
Coast Redwoods form almost pure stands in some areas—especially on flat, silt-covered river plains—but they are also found in mixed evergreen forest with the majestic Douglas-fir, as well as western hemlock, grand fir, and Sitka spruce. On drier slopes tan oak, madrone, maple, and California bay laurel grow along with the evergreens. Rhododendrons and a variety of ferns are the most common understory plants. Other plants which flourish under the trees in the duff of fallen needles include poison oak, huckleberry, hazel, and many flowering herbs.

Mammals found in the Redwood forest include the ubiquitous raccoons and skunks, black bears, Roosevelt elk, deer, squirrels, porcupines, weasels, mink, and the rare ringtail cats. Among the birds found here are the marbled murrelet and the northern spotted owl, both of which nest almost exclusively in old-growth Redwood and Douglas-fir forest. Many visitors in the Redwoods notice a common mollusc, the yellow banana slug.

It is generally believed that the last ice age limited the Coast Redwoods to their present range, a narrow 450-mile strip along the Pacific Ocean from central California to southern Oregon. In the Redwood belt, temperatures are moderate year-round, and heavy winter rains and dense summer fog provide the trees with the water they need.



it is hoped, their own natural endurance will enable them to flourish as they have for thousands of years past.



This climate was far more common in earlier eras. Paleobotanists have discovered fossil Redwoods throughout what is now the western United States and Canada, and along the coasts of Europe and Asia. Some of these fossils are as much as 160 million years old. Redwoods are relatively recent arrivals in their current region; the earliest fossil record in California is found in rocks less than 20 million years old.

A natural Coast Redwood forest is a perfect recycling system. The soil (like that in any high-rainfall climate) contains few nutrients; most of the substance necessary for life is in the trees themselves, living and dead, and in the other plants and animals of the forest. If trees are removed from the forest instead of being allowed to die and decay naturally, many nutrients are lost from the cycle.

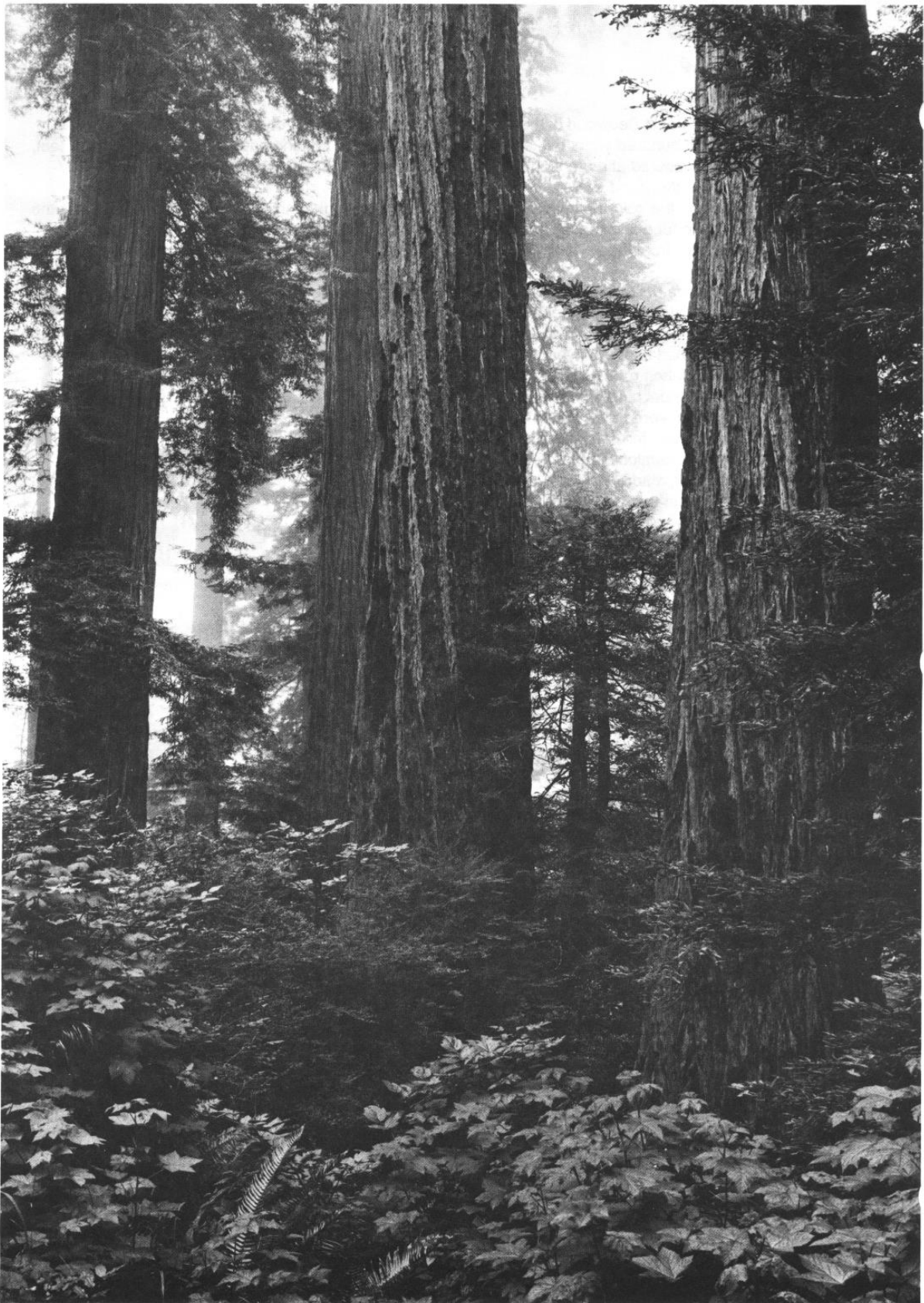
Landscape architect Frederick Law Olmsted Jr. once said, "This generation has received, as a free inheritance from past ages, a hoard of forest wealth. But if any of the future generations for thousands of years to come are to have the opportunity of enjoying the spiritual values obtainable from such primeval forests, this generation must exercise the economic self-restraint necessary for passing on some portion of this inheritance, instead of 'cashing-in' on all of it." Since 1918 the Save-the-Redwoods League has worked to preserve the great Coast Redwood forests for future generations by purchasing Redwood lands for the California Redwood State Parks and Redwood National Park. When these parks are complete, the Redwoods will be protected from man-made dangers. From that time on,

Save-the-Redwoods League

114 Sansome Street, Room 605
San Francisco, California 94104



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Del Norte Coast Redwoods State Park

Photo by Howard King